

Patent Abstracts of Japan

PUBLICATION NUMBER : 59031573
PUBLICATION DATE : 20-02-84

APPLICATION DATE : 16-08-82
APPLICATION NUMBER : 57140980

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INT.CL. : H01M 10/40

TITLE : NEGATIVE ELECTRODE FOR LITHIUM BATTERY

ABSTRACT : PURPOSE: To increase charge-discharge performance of a lithium electrode by using lithium treated with ethylene carbonate as a negative electrode.

CONSTITUTION: The surface of lithium is treated with ethylene carbonate. By treatment, a protection film having Li⁺ion conductivity is formed and charge- discharge efficiency of a lithium electrode is increased. The formation of a protection film on the surface of lithium by ethylene carbonate treatment is made in such a way that lithium plates as both electrodes, and electrolyte prepared by dissolving 1mol/l of LiClO₄ in a mixed solvent having a molar ratio of 6:1 of ethylene carbonate (EC) and propylene carbonate (PC) are used to construct a cell, and constant current treatment is conducted, then additional cell is assembled by using a positive electrode mentioned above as a counter electrode, platinum as an operating electrode, and lithium as a reference electrode, and lithium is deposited on the Pt electrode.

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